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SportsField

MANAGEMENT

May 2021

Vol. 37 No. 5

The Official Publication of the Sports Turf Managers Association

Making the Most of an Internship **14** | Tank Mixing Procedures **18**
Job Search Tips **22** | Sporting Grounds **28**



Women in the Turfgrass Industry

University of Tennessee study examines barriers, opportunities and more

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Contents

MAY 2021
VOL. 37, NO. 5



8

28

Sporting Grounds

Sport-specific Considerations
for Lacrosse, Rugby and
Field Hockey Fields

30

Landscape Maintenance

Mower Trends

36

Tree Care

Check for Root Flare-ups

38

Important Ways Trees Improve
Our Lives



46

8

Industry Insights

Women in the Turfgrass Industry

14

Internships

Selecting and Making the Most of
an Internship

18

Tools and Techniques

Tank Mixing Procedures

22

Personal and Professional Development

Is the Grass Greener? How to make
informed job search decisions to
advance your career



38

DEPARTMENTS

6

Editor's Note

7

STMA President's Message

17

John Mascaro's Photo Quiz

40

Equipment and Technology Focus

42

Innovations

45

STMA In Action

46

From the Twittersverse

48

Marketplace

49

STMA Chapter Contacts

50

Q&A

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Editor's Note



John Kmitta

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In this issue of *SportsField Management*, we delve into the topic of sporting grounds with a look at sport-specific considerations for lacrosse, rugby and field hockey fields (see article beginning on page 28).

And while the focus of the article is on those sports, which are all experiencing growth in the U.S., another sport with specific field considerations is cricket.

According to Mark Heinlein, MSc, CFB, director of technical projects and research at The Motz Group, and chairman of the American Sports Builders Association, cricket is widely popular in Asia, Australia and Europe, but is receiving increased interest in the United States as well.

"We are seeing more requests for information on how to build a cricket field in the U.S.," said Heinlein.

"Cricket is an interesting sport, because the wicket is highly specialized material," he said. "You can't really play cricket unless you have a cricket wicket. But when you have a wicket, that pitch becomes unavailable for other sports. It's a

little bit like an infield, except even more significant with regard to the hardness and the speed of the surface. It would be a bit like playing soccer or football with an infield in the middle of the pitch."

According to Heinlein, there are now rollout wickets that are opening up the opportunity to have a large multi-field complex with a cricket field.

Heinlein added that cricket fields are huge. "We have built full-size cricket fields that are more than 20,000 square meters, or more than 200,000 square feet," he said. "So they take up a lot of space. But in these multi-sport facilities we have in the U.S., we often have fields that are side-by-side-by-side, and there is a runoff area separating them. That area is conducive to cricket in the sense that the size is there, and if there is a runoff area adjacent to two fields, a rollout or temporary wicket can be placed in there and you can play cricket. If you have a multi-sport facility in that configuration, it is pretty easy to adapt it to a temporary cricket field." **SFM**

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Howdy STMA members!

By now, if you've read any of my previous President's Messages, you've probably figured out that I'm big into using quotes. I figure why struggle to say something that someone else has

already summed up for me in a better manner. As I was looking for my usual gem of knowledge to share this month, I came across this quote from University of Alabama Head Football Coach, Nick Saban, about the five choices we have in life.

"You know, we have about five choices in our life," he said. "We can be bad at what we do. We can be average at what we do. We can be good at what we do – which probably is God's expectation for whatever ability He gave us. Or we can be excellent... or we can be elite."

Saban went on to further discuss the topic of what it takes to be excellent/elite:

"Everybody has a choice as to what they want to do and how they want to do that," he said. "But if you're going to be excellent or elite, you've got to do special things. You have to have special intensity, you have to have a special focus, you have to have a special commitment, and drive, and passion to do things at a high level and a high standard all the time. It doesn't matter what God-given ability that you



Nick McKenna, CSFM

STMA President

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have...that probably can make you good. But without the rest of it, I'm not sure if you ever get excellent or elite, and that's the part that we're trying to get to."

So, a lot of you might be wondering what this has to do with being a sports field manager. One of my favorite things about sports is that the skills and lessons learned through them translate well beyond the game and into the rest of our lives. These are the same skills and traits that are mentioned above, and we, as sports field managers, do them on a daily basis.

The big takeaway for me from Saban's statement is this: life is about choice. We can choose to have a positive or a negative attitude, we can choose to be thankful instead of ungrateful, and we can choose to be excellent/elite as opposed to bad/average/good. We have the choice every day to be elite, and that requires a conscious, deliberate effort.

As we continue through this year, let's all make that choice and be the best we can be! **SFM**

Nick McKenna, CSFM



WOMEN IN THE TURFGRASS INDUSTRY

BY DEVON CARROLL AND CARRIE STEPHENS, PH.D.

A look at most athletic fields before a game rarely reveals a woman working to prepare the playing surface. The turfgrass industry is estimated to support more 800,000 jobs in the United States. However, despite comprising 51% of the U.S. population and 47% of the overall labor force, women certainly do not represent nearly half of the labor force in the turfgrass industry. Although female groundskeepers have recently gained attention in media, their numbers are few. As of February 2020, only 100 of the more than 2,500 members in the Sports Turf Managers Association (STMA) were women, making up just 4% of total membership. Surprisingly, this number is slightly higher than the 2% female membership reported for women working in golf turf by the Golf Course Superintendents Association of America and Canadian Golf Superintendents Association.

The low percentage of women in turfgrass classifies such work as a non-traditional job, defined by the United States Department of Labor as an occupation with 25% or less female employment. Other non-traditional labor sectors with similar percentages of female employment to turfgrass include welding, construction, plumbing and electricity (2.2 to 5.3% women). The low engagement of women in turfgrass is a problem as the industry faces labor concerns. In recent years, a decline in the U.S. unemployment rate and immigrant and blue-collar worker availability has affected hiring. In the past 12 months, the effects of COVID-19 have exacerbated the labor issue. As the industry struggles to fill positions, recognizing the under-utilization of women could be a solution. Can increased recruitment of women to the turfgrass industry close the labor gap?

Imagine if the percentage of women working in sports turf rose from 4% to 10%. Based on current STMA membership, this relatively small increase would result in an additional 150 women seeking employment. Now imagine if the percentage changed to 20% or 30% women. Refining recruitment methods to attract women to the industry could ease labor concerns and result in a more diverse workforce. Barriers faced



uniquely by women may be limiting the number of women entering and remaining in the industry. In other agricultural fields, research has been conducted to identify challenges and opportunities for women in order to increase their recruitment. This information is of value to the turfgrass industry to improve recruitment and retention strategies for women and to ease labor concerns.

FEMALE JOURNEYS TO LEADERSHIP

Researchers at the University of Tennessee in the Department of Agricultural Leadership, Education and Communications took a scientific approach to determine barriers and opportunities for women in the turfgrass industry by interviewing female leaders to explore their lived experiences. Thirteen female leaders participated in the study and represented diverse backgrounds including 6 to 30-plus years of experience working in turfgrass; geographic locations in three countries and comprised of nine U.S. states and three Canadian provinces; and job titles ranging from athletic field manager to assistant athletic field manager to graduate student to golf course superintendent and assistant golf course superintendent. Five of the women work in sports field management and eight in golf. Female leaders participated in 30- to 90-minute interviews conducted remotely via Zoom. Interviews were semi-structured and posed

the central research question, "What lived experiences have shaped your career in the turfgrass industry." Transcriptions of interviews were used to develop themes intended to encompass the experiences and views of all 13 participating women. Responses from female leaders established themes of career paths, challenges and opportunities.

OPPORTUNITIES FOR CHANGE

Understanding the journeys to leadership of women currently working in turfgrass can inform recruitment efforts seeking to involve women who may have a predisposition to find work in turfgrass interesting and rewarding. Despite their diverse backgrounds, women interviewed in this study had similar childhood upbringings and influences on their career choices. Women described their childhoods as involving time spent outdoors through farming, playing sports, and engaging in other outdoor activities such as hiking, hunting or fishing. These activities were noted to stimulate choices to work in an outdoor, hands-on environment later in life. Additionally, all of the women placed emphasis on the importance of education in their journeys to leadership. Twelve of the interviewed women hold degrees in turfgrass or closely related fields. Women felt this education was essential to their ability to garner respect and grow within the industry.

Women also expressed their leadership styles were key components to successful professional development. The most common self-identified leadership style among participants was open leadership. This leadership style encompasses hands-on leaders and emphasizes communication, relationship building and teaching. Female



leaders with this style described the importance of working alongside their crews in order to prove themselves and build connections. Women felt fostering relationships with their crew members allowed them to better communicate why tasks were important, which was noted to empower employees through education. Participants in this study believed their leadership styles differed from

those common to male counterparts primarily due to their focus on the emotional aspects of leadership such as keeping staff happy. Female leaders engaging in open leadership experienced positive responses from employees, and felt this leadership style aided in their leadership success.

Although women in leadership roles in turfgrass were generally positive about their experiences working in the industry, women cited many challenges to their success and happiness. Challenges fit into three main sub-themes including building a family, experiencing sexual harassment, and overcoming stereotypes. For example, women described their disappointment in being mistaken for someone's wife or an hourly crew member rather than the field manager. Additionally, women expressed their discomfort in being pursued romantically at conferences, at work and on social media. Women were hopeful sharing these experiences would

provide comfort to other women in similar situations and bring light to the need for change in the current industry culture.

Study participants indicated females working in turfgrass and the industry itself can take steps to improve the experience for current and future women. Women can create space for themselves in the industry

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personally and professionally. Emphasis was placed on the need for women in turfgrass to build camaraderie with other women to overcome challenges. Women were also encouraged to work on maintaining a positive mindset, recognizing and improving strengths and weaknesses, and pursuing opportunities. Educational, leadership and mentorship opportunities are available to women through participating in “Women in Turf” events, serving on local or national association boards, and attending conferences.

Interviewed women described that the industry can support women by continuing to fund these events and encouraging female counterparts to engage. Women also discussed how men in the industry can provide support through acceptance, mentorship and advocacy. Many women relied on male friends and mentors on their journeys to leadership. Women were hopeful more men would fill these roles by speaking out when misconduct is observed, encouraging women to pursue growth, and believing in their abilities.

MOVING FORWARD

Results of this study revealed women in turfgrass are successful leaders, and their experiences can shape future female recruitment. While 12 women in this study had turfgrass degrees, 10 of the 12 started in careers other than turf. This finding



indicates few women are entering the industry immediately after high school. In order to increase recruitment, women and men need to be informed of opportunities in the turfgrass industry in middle and early high school to promote turfgrass as an immediate career. Given that all 13 women in this study described their upbringing as one involving outdoor activities, focusing recruiting efforts on students who play sports or are involved in agriculture will likely yield greater interest in turfgrass. Increasing female visibility on athletic fields and through social media may also foster interest by showing young females that career opportunities in the turfgrass industry are possible and rewarding for women.

In order to retain women currently working in turfgrass, the industry should continue to fund and participate in “Women in Turf” events. Participants described these events as essential to fostering a spirit of community and initiating change. Additionally, mentorship provided individually or through formal mentoring programs is needed and was found to promote professional development and leadership growth.

Women interviewed in this study were hopeful sharing their experiences would provide insight on improving recruitment strategies and industry culture for women. Recruiting a diverse workforce with more women will likely

lead to innovation and may ease employment concerns as the labor force grows. **SFM**

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Selecting and Making the Most of an Internship

By Adam Thoms, Ph.D., Stephen Lord, CSFM, and Weston Appelfeller, CSFM



Just like other careers, the sports field management industry relies heavily on the internship process. Skills learned on the field can help supplement knowledge learned in the classroom, and, in many cases, set an individual apart from others. Finding the correct internship can be a bit of tricky process, but with any luck an internship will be one that

you will grow from professionally while learning new skills. Being an active member in the STMA can help you meet people who will set you up with excellent internships. Attend the national STMA Conference and Exhibition, and meet as many people as you can. If you can't attend the national conference, attend the local chapter events or look at the listings

on the STMA website. Also, start early, especially if you have a specific opportunity in mind. Many students start looking for an internship in October/November. If you are new to the turfgrass industry and have never worked an internship, consider an opportunity where you can learn as many new skills as possible, over perhaps just working at a facility

because of the team's name. Also, consider moving out of your comfort zone for an internship by working in a different part of the U.S. or world. Internships are a three-month chance to experience life in an area with which you may not be familiar.

In addition, as you see internships of interest, make sure to ask fellow students if they have any previous experience with those listed. Find out what they liked or did not like about those internships, and see what they would change about those experiences. This feedback can help guide you in shaping your internship.

As you select an internship of interest, you need to prepare a couple of documents, including a cover letter and resume, before you apply. Preparing these before you e-mail the field manager or human resources department will ensure you can move the selection process along quickly if you receive an interview.

Your cover letter should be specific to the job to which you are applying. For example, do not write to a baseball internship and say that you are excited to learn more about football field management. Also, add relevant skills, such as what equipment have you operated, any experience you have with edging a softball/baseball field, or if you have a pesticide applicators license. These skills will set you apart from other potential interns. Remember, too, that you are part of a team, so try to avoid using "I" too much in the cover letter. Your resume should cover skills that you have as well, but not an exact copy of those discussed in the cover letter. With both documents, make

sure to have others read them for errors. Also, make sure you have checked your social media accounts to ensure they are not damaging to your efforts. Employers will often check your accounts, and don't want to see anything that may put their organization in a negative light.

Do some research before your interview. Try to be able to ask a few questions about the facility at which you are applying to work. Have a short, prepared statement that you know by heart about what you want to do with your life as a career so

offer that method on the internship; but always make sure to learn how they carry it out as well, as it may be more efficient. There also may be a reason a task is done a certain way with each crew compared to how another crew at a different facility carries out that same task. Make sure to have an open mind, and one that is willing to grow. Don't forget to ask for feedback on tasks you complete; you want to make sure they are up to standards set or learn where you need to improve. This will help you become a better field manager.

Once settled into a routine on the internship, make sure to learn as much as you can. That is best done by volunteering to work as often as they will let you. Working the off days will help you gain confidence, and often your boss will then allow you to complete more high-profile tasks on game day. There is no better way to learn new skills than by being on the job to carry out the various tasks. Be the employee

that sees tasks to do and completes them without being asked. You will also build a positive relationship with your boss by being the one to volunteer to water on the holiday weekends; this will carry over into an excellent reference when you are done with the internship. Also, make sure you understand there is no job too small for you. The best field managers are often those that have the greatest attention to detail, especially the small details. For example, if, on your way into the stadium, you see the flowers out front are dry, water them and pick up trash instead of walking over it.

Students are often asked how an internship goes when they come



that you can easily repeat it if asked. Make sure you listen to what the others on the interview are saying as well, and ask questions about what they cover. Additionally, during your interview, be willing to tell the field manager what it is that you want to learn from them. This will help them guide your internship. The best interviews are those that feel like a conversation, as this shows you can communicate with others.

Once arriving for the internship, ask questions about the jobs and tasks that you are assigned. This will help you understand why you are completing the various tasks. If at a previous job you had been taught how to carry out a task, you may



back to school, and they may not be sure. As the internship progresses, you should start to see yourself become more independent and carrying out more tasks without having to be told how to do them and when to do them.

Additionally, you will start to get more high-profile tasks such as mowing on game day. If you are not advancing with these tasks, then you are not demonstrating growth for the employer. As an intern, make sure to ask what it is you need to change to show growth and earn the new opportunities. It is often left up to the intern to shape his or her experience, and how much he or she wants to get out of the internship. If you don't show an interest in the job, your boss

will not be interested in showing you new skills.

Do your research and find a good fit for an internship. There are plenty of field managers who are willing to teach you new skills; however, it is up to the intern to learn those skills. Also, make sure to ask plenty of questions and challenge the field manager to explain why they are applying the products they are so that you can grow in knowledge. Make sure you volunteer to work. The best way to separate yourself from the other interns is to be at work and learn from the full-time employees. Typically, it is only three months, and you can use the money when you get back to school. This is how you will gain skills and

earn a better reference, as your boss will see you grow and learn. Take the time to select a good fit for an internship, communicate with the boss, and build a reference for life. These references can really help you throughout your career. **SFM**

Adam Thoms, Ph.D., is assistant professor specializing in commercial turfgrass management, Iowa State University, Department of Horticulture, Ames, Iowa.

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JOHN MASCARO'S PHOTO QUIZ

CAN YOU IDENTIFY THIS TURFGRASS PROBLEM?

PROBLEM:

Dark green lines of turf

TURFGRASS AREA:

Softball field

LOCATION:

Central United States

TURFGRASS VARIETY:

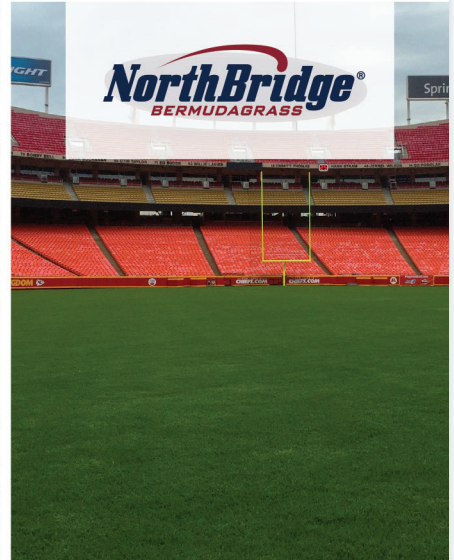
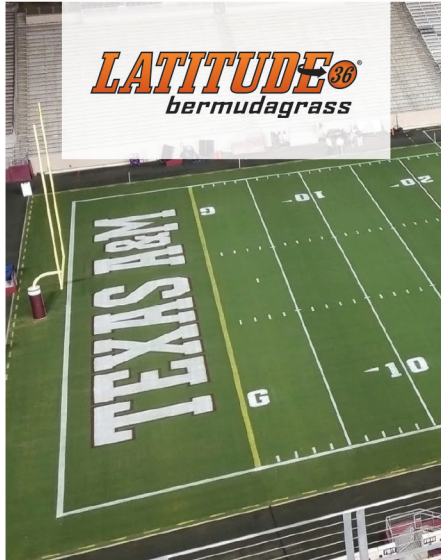
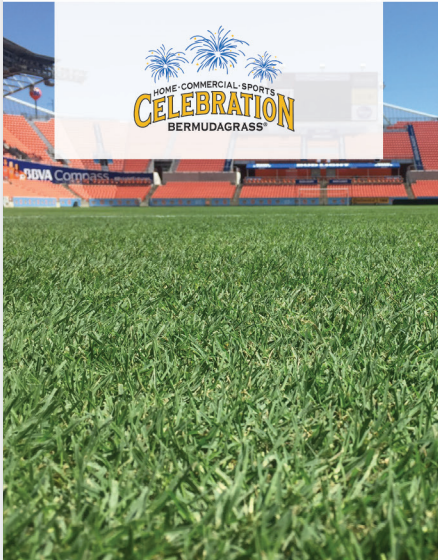
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Answer on page 33

John Mascaro is president of Turf-Tec International



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Tank Mixing Procedures

By Ben Pease, Nick Christians, Ph.D., and Adam Thoms, Ph.D.

From the previous article (in April *SportsField Management*), we see that tank mixing is a common practice in all aspects of turfgrass management with many benefits: apply multiple chemistries at once; improve the spectrum of pest/disease control; make time-sensitive applications; and, of course, save time and money through reduced labor costs, equipment wear and fuel usage. Tank mixing is much more than just throwing all of your products in your spray tank at once. Proper tank mixing is important because product-mixing order can affect product efficacy, impact turfgrass health, and help avoid costly/time-ly product incompatibilities.

When preparing a tank mixture, we should be mindful of the following considerations: Are you using a new product? Are you using a different formulation than usual? Has your water source changed? Have you made any equipment changes or upgrades? These questions and more are a concern because changes or additions to a tank mix could lead to issues known as physical and chemical incompatibilities.

Incompatibilities occur when one product interacts (negatively) with another product in the tank mixture. These interactions, also known as synergism, are an interaction of two or more substances to produce an effect greater than the sum of their separate effects. In the case of an incompatibility, this synergistic effect is detrimental to the tank mixture and/or turfgrass health. Indicators of a physical incompatibility (or synergism) are layering in the tank,

excessive foaming, formation of oily residues, or products that will not dissolve or suspend in solution, usually causing precipitation of products or formation of gel-like solution in the tank or hoses. Indicators of a chemical incompatibility (or synergism) are more difficult to recognize. Unlike the visual indicators of a physical incompatibility, a tank mixture with a chemical incompatibility may look normal. Often the symptoms are not evident until hours or days after a spray application, manifesting as turfgrass injury (phytotoxicity) or reduced product efficacy. Did you notice reduced disease or weed control? Tip burn or total injury? This is likely due to chemical incompatibility, often caused by incorrect use (or non-use) of a surfactant. In cases like this, it is important to check the label for surfactant requirements or environmental factor limitations. It is also important to avoid tank mixing root-uptake chemistries (need to be watered-in) with foliar-uptake chemistries.

We can take steps to avoid tank mixture incompatibilities. The first step is always to check the product label. Likely, the label will list products that are compatible and incompatible with the product in question. Of course, it can never be an exhaustive list, so there may also be instructions for performing a jar test. A jar test is a way to test new products within a tank mixture for compatibility issues, but is done on a very small scale (Figure 1). Rather than risking an entire tank mix of expensive product, this uses fractions of ounces (oz.) of products.

Many labels give you specific mix amounts for conducting a jar test, but, if not, let's examine the math involved. If you have a 300-gallon tank and spray at 40 gallons per acre, your tank covers:

$$\frac{300 \text{ gal tank}}{40 \text{ gal per acre}} = 7.5 \text{ acres per tank}$$

If the product you're testing has an application rate of 64 ounces per acre:

$$\frac{64 \text{ oz}}{\text{acre}} \times \frac{7.5 \text{ acre}}{\text{tank}} = \frac{480 \text{ oz product}}{\text{tank}}$$

You need 480 oz. of product per tank. To calculate the ounces required for a jar test, we set up a proportion just as we did during sprayer calibration, followed by cross multiplication and division:

$$\frac{480 \text{ oz}}{300 \text{ gal}} = \frac{X \text{ oz}}{0.125 \text{ gal}}$$

$$X = \frac{480 \times 0.125}{300}$$

$$X = 0.2 \text{ oz} \times \frac{29.57 \text{ ml}}{\text{oz}} = 5.9 \text{ ml}$$

This is assuming a 1-quart (16 ounces or 0.125 gallons) container. You will need 0.2 oz. (or 5.9 ml) of product to mimic what would be in a full tank mix. Aside from performing a jar test, tank mixture steps and order of product addition play a large role in avoiding incompatibilities.

As was mentioned previously, reading the product label is the first step. The second step is to add at least 50% of the required total water volume to the spray tank. Third, begin agitation and then start add-



Figure 1. Jar test examples. Jars in picture A contain, from left to right: fungicide, fungicide + herbicide, fungicide + herbicide + surfactant. Note the layering prior to adding a surfactant. Jars in picture B contain, from left to right: growth regulator, growth regulator after agitation, growth regulator + agitation + anti-foamer. Note the excessive foaming prior to adding the anti-foamer. Photos by Ben Pease

ing products, one at a time, into the tank based on the product's formulation (more on this later). Fourth, wait a few minutes between each product addition to allow for complete dissolution. (Full disclosure: I had previously been guilty of skipping this little-known step.) Fifth, once all products have been added and bottle rinsate put into the tank, add the remaining amount of water to the tank. Finally, measure the pH and hardness of the tank mixture, adding adjusters/conditioners and defoamers as necessary.

Correct product mixing order based on product formulation is key for avoiding incompatibilities. There are various acronyms (AWAMLES, WALES, etc.) to guide the process but it is best to use a more comprehensive formulation type list:

- 1 Water soluble packets
- 2 Dry formulations: soluble granules (SG), water dispersible granules (WDG or WG), and wettable powders (WP)
- 3 Ammonium sulfate and dry/solid anti-drift agents and compatibility agents
- 4 Dispersed liquid formulations: micro-capsules (CS), emulsions in water (EW), flowables (F or FL), suspension concentrates (SC), and suspo-emulsions (SE)
- 5 Liquid drift retardants: important to add before EC formulations
- 6 Other liquid formulations: emulsifiable concentrates (EC), oil dispersions (OD), solutions (S), and soluble liquids (SL)
- 7 Adjuvants: crop-oil concentrates, methylated seed oils, nonionic surfactants, and spreader-stickers
- 8 Liquid fertilizers and micronutrients

Wrap up your tank mixing order with the remaining necessary amount of water and any defoamers. Adding products in this order will avoid many of the known product incompatibilities, such as adding an emulsifiable

concentrate (EC) before a dry formulation product. Proper tank mixing order is necessary to avoid the time-consuming, and potentially expensive, pitfalls of product incompatibilities such as sedimentation, separation, and filter/hose/nozzle clogging. In extreme cases, a compromised tank mixture cannot be sprayed and will have to be disposed of properly.

Let's now return to the tank mix example from the previous article. It was calculated that we would need 41.4 gallons of liquid fertilizer, 5 quarts of an EC herbicide, and 7.5 pounds of a WP insecticide. Now that we know the correct mixing order by formulation, we see that this list is in opposite order from being correct. If this list were handed to an unknowing assistant or spray technician, compatibility issues could arise from adding an EC formulation before a WP formulation, or from adding the liquid fertilizer first. The correct mixing order for this tank mix should be:

- 50 gallons of water (it was a 100 gallon tank in the example)
- 7.5 pounds of WP insecticide
- 5 quarts of EC herbicide
- 41.4 gallons of liquid fertilizer
- The remaining ~7.25 gallons of water, plus antifoamer if necessary

Tank mixtures are an important part of any turfgrass management plan. They allow for increased flexibility in daily task management and improve overall turfgrass quality through timely and efficient product application. Following these simple tank-mixing steps ensure that tank mixtures will continue to be an effective turfgrass management tool. **SFM**

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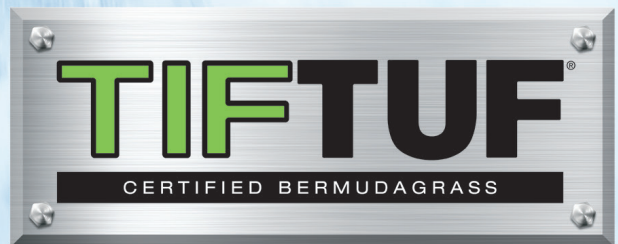
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Is the Grass Greener?

How to make informed job search decisions to advance your career

By Erin Wolfram, M.S.



For better or worse, most of the hours of your life are probably going to be spent at work. This means your job plays a huge role in your overall wellbeing. When changing jobs, it is often very difficult to truly know what to expect in a new position, and whether moving to that new job is the best decision for you. Because of this, the more research you can do in advance to find out as much information as possible about the position and the organization, the more likely you will be able to select quality positions to apply for; and ultimately make a decision you are

happy with when you are given that next job offer. The following information outlines tips to implement as you start thinking about your next career move.

EVALUATE POSITIONS

When considering a job change, it is important to first evaluate why you are seeking a new position, what you are looking for in a new opportunity, and what is most important to you in a new job before starting your search for a new position.

To help you get started, reflect on the following questions:

- What do you like and dislike about your current job and/or organization?
- What values are most important to you (i.e., work/life balance, money, prestige, achievement, integrity, etc.)?
- Are you looking for a lateral or an upward move?
- Are you bound to or interested in a certain location?
- What are your salary requirements?
- If you are looking to move to a new location, how will cost of living impact your salary needs?

- What are your non-negotiable needs and/or wants in terms of a new position?

- What are your long-term career/life goals, and how will this new position help you progress toward those goals?

Next, use your responses to these questions to narrow down the positions and organizations in which you are most interested. Then, once you start searching for jobs, utilize this information to select the opportunities that will be the best fit for you based on what you need and want in a new position. As you find potential jobs to apply for, use this information to evaluate if each position meets your needs and includes several of your wants. If it does not, move on to the next position and continue searching.

RESEARCH COMPANIES/ ORGANIZATIONS

After you find opportunities and organizations in which you are interested, conduct as much research as possible to evaluate whether the job and organization will be a good fit for you. You can also use this information in the future to help you tailor your application materials and explain why you are interested in a specific organization.

1 Gather information about the company/organization online

- Thoroughly read through their website to learn about the size and structure of the organization; the value/mission statement; organizational leadership; other departments; as well as types of facilities, fields, etc.

- Read customer reviews from various sites such as Google and Yelp, if applicable, to gain a better understanding of public perception.

- Read news articles or features about the organization to learn about current events and important news items.

After you find opportunities and organizations in which you are interested, conduct as much research as possible to evaluate whether the job and organization will be a good fit for you.

- Find out who their competition is and review information about them for comparison.

- Utilize sites such as Glassdoor.com or Indeed.com to access reviews from current and past employees to gather information on company culture, work environment, and/or potential interview questions.

- Follow the organization on social media sites such as Twitter, Instagram, Facebook, LinkedIn, Pinterest, etc., to stay current on their latest news and events, as well as to observe how they interact with the public.

2 Tap into your network

- Reach out to people in your network who have direct information. If you know anyone who currently works at the organization, worked there in the past, or has another relationship with the organization as a vendor, customer, etc., reach out to them and see if they are willing to have a conversation to learn more about the environment and culture.

- Expand your network. Reach out to others in your network and find out if any of your contacts know

anyone who has a connection to the organization either as a current or former employee, vendor, customer, etc. If so, ask if they would be willing to connect you to that person so you can reach out to request information.

- If you are not sure if you have any contacts who may be able to provide valuable information about the organization, utilize LinkedIn to help you. Start by searching for the organization on LinkedIn. You will be able to see if you have any direct first-level connections who work at the organization or second-level connections. If you have a second-level connection, LinkedIn will tell you which first-level connection you and the person have in common. You can then reach out to your first-level connection to see if your direct contact is comfortable making an introduction so you can ask the person some questions.

Here is an example of what that request may look like:

Hi Lucy,

I hope you are doing well! I see you are connected to Tyler Graham who works for St. Charles Parks and Recreation. I am interested in applying for a position there, and was hoping you could introduce me to Tyler so I can see if he would be willing to answer a few questions.

Thank you,
Jeremy

3 Visit the location

- If the organization is a public facility or has an upcoming event and it is close to where you live, consider visiting the location to experience the facility from a visitor's perspective, but also as a potential employee.

■ When you return home, make a list of your positive and negative observations.

Now that you have collected information from your online research, conversations with others, and your own observations, you can continue to make informed decisions. Based on the information you have gathered, ask yourself if you are still interested in the position. If the answer is “yes,” tailor your application materials and apply. If the answer is “no,” continue seeking opportunities that may be a better fit for you and your career goals.

PREPARE FOR INTERVIEWS

Preparing to interview is a critical step in the job search process. You will want to use the information you collected while researching organizations to help you prepare for your interview so you can prove your value to the organization and

also continue your evaluation process.

1 Brainstorm examples of your accomplishments

Brainstorm examples of your accomplishments that best demonstrate your skills, strengths and qualifications as they relate to the position and organization. The more your stories are directly related to the job and organization, the better. Utilize the information you gathered, as well as information from the job description, to help you.

2 Write or type out these examples and practice delivering them

Think of these examples as stories that have a beginning, middle and end. Remember the acronym STAR. You want to state the Situation you were in, the Task(s) you were assigned, the Actions you took to complete the task(s), and the Result(s) or outcomes(s)

of your actions. If you have trouble coming up with examples of accomplishments, seek your colleagues' or supervisor's help in generating ideas. In addition, prepare for other common interview questions such as:

- Tell me about yourself.
- What are your greatest strengths related to this position?
- What is your biggest weakness?
- Why should we hire you?

3 Research the interviewer(s)

If possible, try to obtain information on who will be interviewing you to help you anticipate the types of questions they may ask and to help you prepare specific questions for your interviewers. Once you have a list of the individuals who will be conducting the interview, check the company website for a bio or any additional information about them,

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4 Prepare interview questions

Remember, you are interviewing the company too. Use this opportunity to further evaluate whether the position and organization are a good fit for you. Make a list of questions you want to ask your interviewer(s); aim to have at least five questions.

Your questions should not be about anything you could have found easily through your own research. They should, however, demonstrate you have done your research and are excited about the opportunity. Avoid questions about salary, benefits, time off, etc.

Here are a few examples of questions to ask during an interview:

- I noticed many of you have worked here for over five years. What

do you enjoy most about working here?

- What do you feel should be the top priority for the person stepping into this position?

- What do you think are the current challenges facing the person in this position?

- I have been very active in the Sports Turf Managers Association since I started my career. What opportunities are there for professional development?

- I noticed you started a \$2.5 million phased capital improvement project last June. How is that project progressing, and what is the next phase in the plan?

5 Prepare your interview attire

It's important to dress to impress at an interview. Typically, if you are interviewing for an upper-level management position, you will want

to wear something more conservative such as a suit or at least a collared shirt or dress shirt and slacks or skirt. Make sure you are well put together and ready to make a great first impression.

6 Bonus tip

Always send a thank you letter after an interview to each person who interviewed you. Here is an example of what you might include in a thank you letter following an interview.

Dear Mr. Stratten:

Thank you for taking the time to interview me and provide further information about the Head Groundskeeper position. I enjoyed learning more about the job specifications and the facilities at St. Charles Parks and Recreation, especially regarding the next steps in your phased capital improvement project. The information you provided certainly solidified my interest in this great opportunity.

With my 18 years of experience in a variety of organizations, including 10 years at Liberty Parks and Recreation working on a similar project, I know I have the qualifications needed to excel in this position and immediately make a positive impact. If you have any questions or would like any clarification on why I am the best candidate, please do not hesitate to reach out to me via phone or e-mail at 816-555-6987 or JWhiley@turf.com.

It was a pleasure meeting you, and I hope to hear from you soon. I look forward to advancing my career with you and your team. Thank you again for your time and consideration.

Sincerely,
Jeremy Whiley

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EVALUATE THE OFFER (ACCEPT/DECLINE)

Hopefully, all your hard work and research has paid off and you are offered the job! It is important, however, to continue the evaluation process even after you have received an offer.

- Ask any clarification questions if you still have any concerns or feel you need further insight.
- Request an onsite visit to meet others with whom you would be working.
- Make sure to receive the full offer in writing including detailed information regarding salary and benefits.
- If needed, further demonstrate your strengths and value to negotiate salary and benefits.
- Review all the information, make a pros-and-cons list, and make a decision.
- Call the employer to accept or decline the offer over the phone and follow up with an official acceptance or rejection letter in writing as well.

Here is an example of both an acceptance and rejection letter.

Dear Mr. Stratton:

It was a pleasure talking to you on the phone this morning. I am delighted to have been offered the Head Groundskeeper position at St. Charles Parks and Recreation. Please acknowledge this letter as my formal acceptance of the position at a salary of \$63,000 per year and a start date of May 1, 2021.

As we discussed, I will see you on April 14 when I sign and submit my official paperwork with your Human Resources department. I am excited about this opportunity and look forward to contributing to your team. Please let me know if you need any additional information at this time.

*Sincerely,
Jeremy Whiley*

Dear Mr. Stratton:

It was a pleasure talking to you on the phone yesterday. I

greatly appreciate the offer to serve as the Head Groundskeeper at St. Charles Parks and Recreation. However, after much deliberation, I have decided to decline the offer and stay in my current position, as I feel that is the best decision for me and my family at this time.

I enjoyed learning more about your facility, and wish you well as you continue the next phase of your capital improvement project. I hope we can stay in touch, and I look forward to seeing you at next year's industry events.

*Sincerely,
Jeremy Whiley*

This may seem like an extensive process; however, moving to a new position is often a major decision, and making the wrong decision can lead to dissatisfaction and possibly even another job search in the immediate future. The more you can research and make well-informed decisions, the more likely you will make a decision that is best for you and your career advancement. **SFM**



Erin Wolfram, M.S., is a career services professional with more than 15 years of experience. She has a specialization in assisting those in the turfgrass management industry, and works with clients to help them recognize their strengths and unique qualities to rise above the competition. She works alongside individuals to make sure they are confident throughout their job search and professional growth, and believes in getting to know clients and their stories to help them reflect their best selves in their application materials and portfolios. She owns and operates Career Advantage and Career Advantage Golf (<http://careeradvantagegolf.com>), and helps professionals throughout the world. Additionally, Wolfram is an ISSA certified trainer, and runs an online personal training and nutrition consulting business, The Fit Advantage.

Wolfram received a Bachelor of Science in Secondary English Education from Kansas State University, as well as both a Master of Science in Counseling Psychology and a Master of Science in Educational Technology from The University of Kansas. She also earned a professional etiquette certificate in 2012 from The Etiquette Institute in St. Louis, Mo. She can be reached at erin@careeradvantageresumes.com.

Sport-specific Considerations for Lacrosse, Rugby and Field Hockey Fields

By John Kmitta

STMA classifies the “sporting grounds” category as fields for “non-mainstream” sports (i.e., anything outside the “Big 4” of football, baseball, soccer and softball). However, in recent years, sports in the sporting grounds category — especially lacrosse, rugby and field hockey — have all seen growth in popularity in the United States. And while many of these “non-mainstream” sports are still played on multi-purpose fields, there are some very specific field maintenance considerations.

“The type of grass, season in which the sport is played, and how the sport is played, changes how it is maintained,” said Brian Dossett, CSFM, head turf manager, Oxner Landscape, which manages Christ Church Episcopal School, Greenville, S.C. “For example, we have a field that is used for field hockey in the fall and lacrosse in the spring. Before lacrosse was added, this field was never overseeded and required little extra attention after the season or in the spring to have great recovery from the previous field hockey season. Now that lacrosse also uses the field, overseeding is a must, and a lot of attention is given after lacrosse season to ensure great recovery.”

According to Scott Thompson, CSFM, director of landscape services at Duke University, the biggest challenge is having one facility meet the needs of different sports in different seasons.

“For us, men’s and women’s soccer have similar needs. The field has the same dimensions and the demands on the field are generally the same,” said Thompson. “Where it starts to get challenging is during the lacrosse season



Linda Reeves Field at Christ Church Episcopal School, Greenville, S.C.

where we have men’s and women’s lacrosse, which have different needs. Ultimately, it is a different style of play. The fields have different dimensions, and often that can make for challenging management strategies. With different styles of play and field dimensions we have to monitor the field closely to ensure the wear and traffic of one sport doesn’t adversely affect the field playability for the other sport.”

Thompson added that field stability and footing are paramount for all sports.

“Things like ball roll and surface smoothness are keenly important in the game of soccer but much less so for the game of lacrosse,” said Thompson. “We often have to mitigate any surface smoothness issues around the attack and scoring areas for lacrosse so they

don’t adversely affect ball roll for soccer in their penalty and scoring areas.

“Typically we are playing soccer on bermudagrass and immature ryegrass,” Thomson added. “We then have a couple of months to prepare and adjust to playing lacrosse on a ryegrass field as our bermudagrass is dormant. Conversely, we have the summer months to transition our ryegrass field back to bermudagrass ahead of soccer season. The downtime between seasons provides us enough time to repair any issues and make adjustments prior to the next season.”

Thompson said his biggest challenge this year is playing all four sports on one field during the same season.

“This year, the biggest thing we have to do is to take it one game at a

time — meet the needs of the sport being played, and then, after the game, make the appropriate adjustments to meet the needs of the next event,” he said.

According to Dossett, the biggest challenge he faces is maintaining the goal creases on lacrosse fields.

“The goal is not very wide; therefore, the goalie wears this area badly,” said Dossett. “Also there is so much activity around these areas from other players either trying to score or help defend the goal. We approach this challenge in various ways. One is to move the goals during practice to an area that doesn’t see as much action during games. Constant moving of goals is a must. We re-seed these areas as we can, and sometimes even cut thick sod from the extreme out-of-play edges of the overseeded field to replace the area in front of the goals.”

Mark Heinlein, MSc, CFB, director of technical projects and research at The Motz Group, and chairman of the American Sports Builders Association, agrees that managing extreme wear areas, such as the goal crease in lacrosse, is the biggest challenge to maintaining fields in the sporting grounds category.

“That goalie sits in a 6-foot circle,” said Heinlein. “So it is a significant issue from a maintenance standpoint.”

“While lacrosse has typically been a sport that is played on a multi-purpose field that hosts other sports, like soccer or football, we are seeing more lacrosse-specific venues installed at the college level,” said Patrick Maguire, RLA, president and managing principal of Activitas. “This is also true of rugby, which has seen an uptick in popularity, even at the high school level. Since it is by far the largest of all fields, we are seeing more and more rugby-spe-



University of North Carolina Karen Shelton Stadium. Photo by Anthony Crisafulli on behalf of Activitas.



Harvard University Mignone Field. Photo by RAD Sports.

cific venues. Since the advent of infilled turf taking over the major stadiums that used to be traditional short pile AstroTurf, we have seen many field-hockey-specific venues installed over the past decade.”

Maguire added that the past few years have seen significant growth in field hockey at the high school and college levels.

When it comes to field design and construction, rugby and field hockey have international governing bodies that recognize the importance of field playing conditions and athlete safety, said Megan Buczynski, P.E., LEED AP, principal civil engineer at Activitas.

“Field hockey at the higher levels is typically played on a short pile system with a watering system, and has very specific recommendations

for resilience and ball roll,” said Buczynski. “Rugby, be it played on natural grass or synthetic turf, has guidelines that pay particular attention to safety and resilience with the goal of minimizing the potential for concussions. Checking in with these governing bodies while planning for a field is always a good idea.”

Heinlein added that field hockey is almost always played on synthetic turf, because of requirements for ball/surface interaction and player/surface interaction.

According to Maguire, the majority of new fields built in the last decade were synthetic, but natural grass fields are making a comeback.

“I think this is really a credit to the sports field managers who have done a great job of keeping conditions on grass fields as close to optimal as possible,” he said. “We’ve also seen a great deal more interest at the professional level in hybrid field technology, as well as vacuum and air ex-

change systems and under-soil heating systems. The number of venues that are also looking into augmenting sunlight with artificial lighting systems is growing substantially.”

According to Buczynski, designing a multi-purpose field to host soccer, field hockey, lacrosse, rugby, etc., is difficult because each sport craves a different type of surface to best support play.

“Working with the owner to help him or her understand how the properties of a surface, whether it be natural or artificial, impact the sport is essential in assisting the owner with the final surface decision,” she said. **SFM**

John Kmitta is associate publisher and editorial brand director of SportsField Management magazine.



Photo provided by Toro

MOWER TRENDS

For in-depth insight into the commercial mower market, *Landscape Business*, an affiliate of *SportsField Management*, recently asked representatives from major mower manufacturers to share their thoughts regarding trends, the impact of the pandemic, and their outlook for 2021. The following content is excerpted from that editorial coverage.

***Landscape Business (LB):* What trends, in general, are you seeing with regard to commercial mowers?**

Efficiency remains key for landscapers as the pandemic continues to affect the landscaping market. Commercial mowers that have intuitive operator interface, quick access for cleaning and service, and a fast mode of operation are important to aid the teams in long work days with less operators. Alternative fuels are also gaining

notice in the commercial landscape, specifically electric operation.

– Ron Scheffler, senior product manager, Bobcat Mowers

Commercial mowers are an investment that contractors want to withstand heavy usage for at least two to three years. Knowing that a mower is reliable and won't cause unexpected delays at a jobsite is top of mind for contractors. And when it comes time to service the mower, contractors want to be able

to do so as efficiently and effectively as possible.

Because of this need, reliability and serviceability are key to a long-lasting, well-functioning mower. As a result, manufacturers are constantly working on features that make a mower easier to service. Ensuring that a mower is easily serviceable continues to be a driving trend in commercial mower development.

– Steve Cathey, territory manager,
Kioti Tractor

There are three notable trends that we're seeing in the commercial mower space:

1. Advances in suspension are providing more comfortable operation for lawn crews, which also allows them to mow faster and be more productive throughout the day. And, of course, that productivity translates into more revenue.

2. Adoption of EFI has been growing as the price point of the technology has come down, which not only helps with fuel savings, but also requires less maintenance, is easier to start and generally more reliable. Along with EFI, the next advancement is EFI with Electronic Throttle Control, which keeps the engine operating at an optimal operating RPM regardless of the turf conditions.

3. Stand-ons are gaining in popularity, especially with landscapers who are doing more residential work. New stand-ons have the wide mower decks and speed to deliver productivity, but also are great on inclines.

– Joe Ferris, product manager,
Briggs & Stratton

Regarding mower trends in the commercial space, it is all about versatility. If a contractor can handle a laundry list of different tasks and applications with a single machine, what they're essentially doing is streamlining their fleet and putting money right back into their opera-



Photo provided by Bobcat Mowers



Photo provided by Hustler Turf

tion's bottom line.

Additionally, there's been a noticeable bump in overall popularity of stand-on mowers in the landscape contractor equipment marketplace over the past couple of years. Many contractors enjoy the increased visibility, ability to get on and off the machine easily, traction and stability on slopes that stand-on mowers can provide. Furthermore, contractors can potentially fit more equipment on their trailers by leveraging the smaller overall footprint of a stand-on machine.

Finally, the increased adoption of battery-powered products in the professional sphere has finally arrived. Like any new technology, battery-powered professional lawn maintenance equipment has been met with a bit of resistance, and right-

ly so. Arguably, the technology that has been available up until this point didn't necessarily match up to the performance or runtime of gas-powered machines, or has simply been cost-restrictive and impractical. We believe with the introduction of our battery-powered heavy-duty 21-inch mower that we've found the perfect balance of power without compromise, at an attainable price point.

– Jared Nuessen, marketing
manager at Toro

The pandemic introduced a shortage of commercial landscape employees, which creates a significant need for units with larger deck sizes, like the Super 104 or Super 88, that will mow more lawns with less people required.

– Brad Unruh, director of new product
development at Hustler Turf

What landscape contractors need in a mower really hasn't changed. They need productivity and efficiency, but there's a lot that feeds into that. Increasing productivity isn't just about a higher horsepower engine or a larger cutting deck. It's quality of cut as well, because if you have to go back and double-cut properties, having an extra-wide cutting deck isn't worth much. Also, if you have downtime related to service and maintenance, it affects the overall productivity and efficiency of the machine.

– Lenny Mangnall, Exmark
product manager

As in past years, lawn mower reliability, efficiency of use and being easy and inexpensive to maintain continue to be extremely important issues for landscape professionals. The commercial landscape market also benefits from increased innovation and development of equipment and tools. Outdoor power product owners, especially those who operate commercial mower models, remain focused both on how to get the most value from their equipment and how to most

effectively complete outdoor landscaping maintenance and projects.

Customers also remain on the lookout for ways to make their businesses and operations more environmentally friendly. This means that fuel-efficient and zero-emissions products are proving to be attractive, along with battery-powered products.

Noise abatement, both for operators and consumers, is an increasingly important aspect of environmental sustainability. As people in the community are asking for less noise from landscaping activities, quiet operation reduces sound pollution.

– Elisha Lipscomb, senior marketing strategist, lawn & garden for Honda Power Equipment

Over the past year, ride comfort and productivity enhancements continue to be key trends within the commercial mowing industry. With this, manufacturers are delivering equipment equipped with features to cater to those needs. As the labor shortage continues nationwide, professional landscape contractors are forced to do more with less, making productivity and efficiency a major priority in their purchasing decisions.

– Chase Tew, product line manager, John Deere Commercial Mowing

Based on industry trends, the commercial ZTR mower market shipments have been flat compared to last year, while the stand-on segment has seen a 10% increase over last year's results. Some manufacturers are experiencing supply chain issues, which are impacting commercial mower deliveries and, in turn, the overall commercial mower segment.

– Tom Vachal, Kubota Turf senior product manager

Battery-powered products continue to make inroads into the traditional gasoline-powered machines market share for consumer mowers, and the same is starting to be evident



Photo provided by Exmark



Photo provided by Briggs & Stratton

for the commercial market as well. Power and runtime are still though the Achilles heel of many battery mowers targeted at commercial users, but each season improvements continue to be made in addressing these weaknesses.

– Steve Hughes, managing director, Masport Ltd

LB: How did the global pandemic impact mower manufacturing and sales, and what impact will it have on the mower market in the future?

The pandemic certainly affected us on the manufacturing side, as some components were unavailable from our suppliers, due to plant shutdowns, which forced us to be more specific on commercial product production to

help meet our customer's needs. On the sales side, while the overall commercial market was down due to the pandemic, we saw growth on that family of products. In the future, I think landscapers will be analyzing their purchasing decisions more to determine what commercial products in the market will aid them in getting their job done with a smaller workforce.

– Ron Scheffler, senior product manager, Bobcat Mowers

The impact of the pandemic was felt in different ways.

First, more time spent at home meant that homeowners wanted their yards looking great, whether they were taking care of it themselves or hiring a contractor to handle it. And in many parts of the country, lawn and landscape workers could continue to work throughout the various quarantine orders, so companies in those areas didn't see the slow down that others might have experienced.

As an industry, one of the bigger challenges the pandemic created for all manufacturers was supply chain issues, as plants globally slowed production or shut down for periods of time. While some of these issues persist, we are committed to working through them and supporting our dealer and distributor partners to make sure that their customers' needs are met.

– Joe Ferris, product manager, Briggs & Stratton

Although the events of 2020 and into 2021 have disrupted markets across the globe, overall, we have a positive outlook for the future. Specifically, one byproduct of people spending more time in their homes and opting for small, outdoor gatherings over large, public events has been an increased importance in the beautification and maintenance of their own outdoor spaces. This actually translates to increased residential mower and tool sales, but also an increased demand

JOHN MASCARO'S PHOTO QUIZ

ANSWER

From page 17

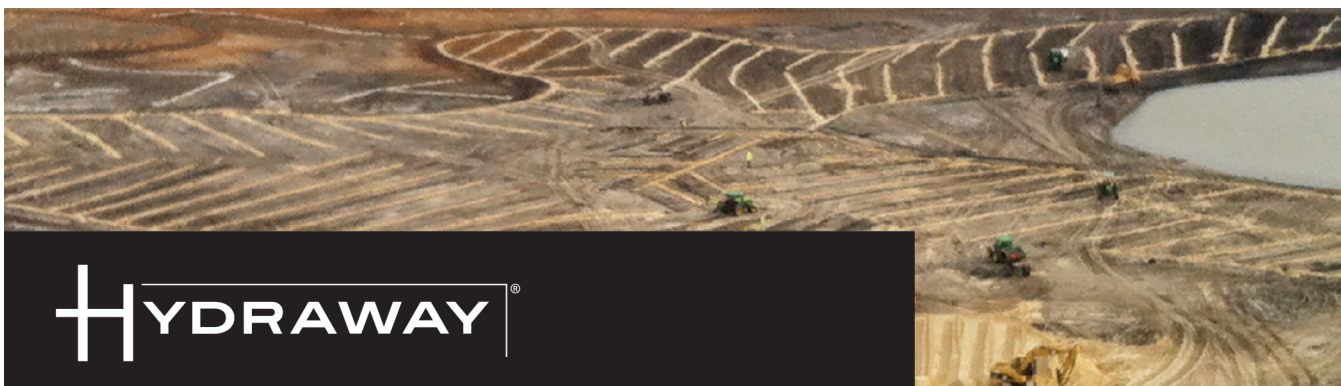
This photo is from a good friend who submitted the photo anonymously so no one would be embarrassed, although things like this happen to us all. Grass never shows problems, like green streaks, in a straight line. As you probably guessed, the problem is manmade. The issue here is known in the industry as the zebra stripe fertilization technique. A spray application of liquid fertilizer was applied to this bermudagrass baseball field, but the outside booms of the spray rig were not on. A couple of days after the entire field was fertilized, it looked like this. The color evened out quite nicely after another light application of fertilizer was applied. This is one of those things that happens from time to time, and no real harm was done. It is just a good learning experience.

Photo submitted anonymously

John Mascaro is president of Turf-Tec International



If you would like to submit a photograph for John Mascaro's Photo Quiz, please send it to John Mascaro, 1471 Capital Circle NW, Ste #13, Tallahassee, FL 32303 call (850) 580-4026 or e-mail to john@turf-tec.com. If your photograph is selected, you will receive full credit. All photos submitted will become property of SportsField Management and the Sports Turf Managers Association.



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for the services a landscape contractor can provide. This is an area where landscape contractors have been able to grow their customer base and keep themselves and their crews busy. With light at the end of the proverbial tunnel in terms of putting COVID-19 behind us, we're confident that landscape contractors will be well positioned to continue to grow and provide services for customers they wouldn't have acquired in a normal year.

– *Jared Nuessen, marketing manager at Toro*

The pandemic positively impacted our sales because the more time people are spending at home, the more they realize the need to care for their lawns. Thousands of individuals are investing in their landscapes, which requires contractors to have durable, state-of-the-art mowers in their fleets. However, because of the increased demand for mowers, lead time for manufacturing and production have slightly increased.

– *Brad Unruh, director of new product development at Hustler Turf*

There's a lot of pent-up demand for mowers and equipment in the marketplace at the moment. This is due to a number of reasons, not the least of which is the increased consumer demand for landscape maintenance services. Production capacity will most likely be a limiting factor to mower sales this year. Inbound component availability and global logistic delays are having an impact on production output in several industries. Lawn and garden OEM's are dealing with these challenges.

– *Lenny Mangnall, Exmark product manager*

While Honda Power Equipment was generally optimistic about 2020 at the beginning of last year, the COVID-19 pandemic presented operational challenges for the business, particularly during March and April. Similarly, demand for outdoor



Photo provided by Kioti Tractor



Photo provided by Masport Ltd.

products among landscape professionals waned during late spring as many businesses were faced with an uncertain economy and stay-at-home orders for non-essential businesses. However, as the economy began reopening and product production returned to more regular operations, Honda Power Equipment experienced strong gains for a number of its outdoor power products, including commercial mower models. Now that we're into the second quarter of 2021, Honda Power Equipment is hopeful that trends are leaning increasingly more toward "return to normal" and even greater sales.

– *Elisha Lipscomb, senior marketing strategist, lawn & garden for Honda Power Equipment*

We are very fortunate that commercial landscaping has remained strong throughout the pandemic. With COVID-19 restrictions in place, the world was forced to move outdoors, and the landscape industry played a key role in maintaining those spaces. Landscapers are closely evaluating their needs before making business decisions, such as purchasing new pieces of equipment.

– *Chase Tew, product line manager, John Deere Commercial Mowing*

Business outlook overall is good, but the pandemic, weather and global transportation issues have brought about inventory challenges for many manufacturers. Many are not able to meet production demands, which puts more demand on dealers' inventories and, in turn, the customer. The end result is the commercial mowing segment may experience some product shortages in the coming months. Many commercial mower users will turn to repairing their machines instead of replacing them with new machines.

– *Tom Vachal, Kubota Turf senior product manager*

Like all manufacturers, Masport had its share of problems in 2020 keeping up with demand generated by generally good grass-growing conditions and a general uplift in demand for mowers around the world. Shortages of engines and delays in international shipping, together with massive cost increases in freight in general, made meeting business objectives challenging. The negative effects of COVID-19 continue to put a strain on our ability to supply product on time and to our cost targets. Consumer and commercial machines will remain in short supply for the rest of this season, but hopefully we will see a return to more normal supply in time for next season.

– *Steve Hughes, managing director, Masport Ltd*

LB: What is your overall outlook with regard to the commercial mower market in 2021?

Our 2021 commercial mower outlook looks optimistic, as we see the overall market growing this year. We see the resilient commercial landscapers coming back strong and taking on equipment that they may have decided to wait on purchasing last year, what with all the shut-downs and customers working on home projects with their monetary funds being diverted elsewhere.

– Ron Scheffler, senior product manager, Bobcat Mowers

The overall outlook for the mower market this year and beyond remains strong. With more free time on their hands, some homeowners may have taken a more hands-on approach with their landscaping needs during the past year. However, with more folks getting back to work, they're likely going to begin once again relying on landscaping professionals to maintain both residential and commercial properties.

– Steve Cathey, territory manager, Kioti Tractor

I'm confident that as long as the pandemic continues to show improvement, we'll return to a pre-pandemic state and grow from there. If the country can stay healthy, the industry will stay healthy.

– Joe Ferris, product manager, Briggs & Stratton

Our company, in particular, has been around long enough to persevere through global pandemics, world wars, economic disasters and much more in our 107-year history, and we'll continue to provide the right solutions and equipment to our customers across all segments to make sure that we're here for another 107 years and beyond. Our customers, specifically landscape contrac-



Photo provided by John Deere



Photo provided by Kubota

tors, are a resilient and resourceful bunch, and the sheer grit and determination they bring to the job every day inspires us, as a leading manufacturer, to do the best we can to meet their every need when it comes to the equipment they're looking for.

– Jared Nuessen, marketing manager at Toro

We're looking forward to the year ahead, as landscape maintenance remains a priority for thousands of homeowners. Contractors are still investing in reliable, heavy-duty mowers to meet their business demands.

– Brad Unruh, director of new product development at Hustler Turf

We're very optimistic and believe 2021 is going to be a very good

year on the landscape contractor side of the business.

– Lenny Mangnall, Exmark product manager

Currently, the leading indicators from the industry and retailers are that 2021 will be a good year, overall, for commercial outdoor power equipment market, including commercial lawn mowers.

– Elisha Lipscomb, senior marketing strategist, lawn & garden for Honda Power Equipment

We are very optimistic about the future of the commercial mower market. Despite the obstacles presented in 2020, it was a good year for John Deere in the commercial mowing industry. Looking toward the rest of 2021, we expect to see continued growth and strength in the commercial landscaping industry.

– Chase Tew, product line manager, John Deere Commercial Mowing

I expect the commercial mower market to rebound over last year's down year, but new product supply may be a pacing item, and we might see mower purchases later in the year as the supply rebounds.

– Tom Vachal, Kubota Turf senior product manager

There will be continued supply shortages of machines, a continuation of competition from robotic mower installations, as well as some drop off in demand with homeowners preferring to mow their own properties now that they have had more time to do so following travel restrictions imposed in certain areas due to the pandemic. As is the case every year, though, climatic conditions will dictate how successful the industry will be regardless of the issues that confront us each and every year.

– Steve Hughes, managing director, Masport Ltd

SFM

Check for Root Flare-ups

By Jack O'Shea

With more than 20 years of experience consulting and practicing arboriculture in the Northwest and Pacific Rim, I've seen the same sad story play out again and again.

When trees in the landscape begin to decline, people hire experts like me to try to fix them. The problem? People don't notice the beautiful landscape trees were planted too deeply. Trees grow upward, and their majesty is what we notice. But to inspect, we need to look down, especially at the area of the root crown.

Hiring experts at that point may delay the inevitable. Trees and woody plants in the landscape often die due to poor cultural practices. One of the worst practices is burying the root flare of a young tree. When a tree of any age has roots that are covered too deeply with soil or mulch, contact with the soil ruins the health and integrity of the low bark.

This is because the low bark on trees is "garden variety" bark. Roots below ground have a different type of coverage, and are resistant to most of the rots that are present. If we wet, heat and crowd garden-variety bark, it is compromised and can be infested or infected. Fungi and insects can make a home, and, eventually, the structure of the tree can suffer as well.

Most of a landscape's value can be attributed to trees. Studies have been done that determine how much a landscape costs as a measure of real estate value. It is beyond our



scope, but we as landscapers can protect these investments with a few simple observations.

Most people do not see past green leaves through to the bones of the landscape where a tree may be declining invisibly. With a little practice, you can increase your observation and detection skills to the point where you can see and solve the most common problems with root flares.

Most of what I see are roots and root flares buried under one or more inches of excess soil. The immediate area of the bark is important, and so is the root crown near the base. The flare is the actual spreading part of the root crown that buttresses the tree and holds roots in place. Pulling away soil is a boost to any tree that is suffering from too much soil.

It's as simple as looking down. The root crown is defined as the area

within a few inches below and above the soil line. The line at the soil level forms a "crown" that is important to respiration, vascular differentiation and structure. Let's make sure that's in the proper place.

Most trees are planted too deeply. If it looks like a telephone pole coming out of the ground, it is too deep. Research by Booth and Smiley in 2000 stated, "93% of trees professionally planted are planted too deeply." Lots of nursery-grown trees are planted too deeply in the pots. This may be a carryover from transplanting or heeling-in.

You can train your eye and hand to make sure soil is pulled back to expose the

natural flare. You must look for the spreading or expanding root crown. If it isn't there, gently pull away soil by hand or with any sort of digging tool — just go easy. Damage in the root crown area is magnified by the presence of soil and fungal spores that take advantage of those openings.

We can also avoid many problems that appear later if we plant in nursery plants at the correct depth. This involves measuring the planting site depth (depth of the hole) and making sure the roots are pointing outward.

When cutting roots, use a clean, sharp tool. I use a special pair of secateurs for underground work. Some root loss is acceptable. I have seen 50% loss of roots improve girdled and bound tree stock. Removing that much rooting material requires staking and extra watering in most cases.

Soil problems quickly become tree problems. Compaction, leaching, poor drainage, and other ills are avoidable, and can be handled right away by cultivating and amending.



The hole we plant in must have soft edges to encourage the roots to keep going. Glazed sides of the site must be broken with a shovel.

Rarely, we find a tree in the landscape that is planted shallowly. It is obvious to the untrained eye; root parts or whole roots are above ground. This shows up immediately, even if it is an erosion problem, and most landscape maintenance workers are trained to add soil in this case. I have seen this help a tree, but remember, do not add too much.

Soil problems quickly become tree problems. Compaction, leaching, poor drainage, and other ills are avoidable, and can be handled right away by cultivating and amending.

In most cases, mixing and amending soils isn't much of a benefit, so applying a mulch to the cultivated soil, just a couple of inches thick, is best. The mulch will act on the soil and condition it in a short period. This is aided by good cultivation. Commercial mulches with animal waste that have been properly windrowed do the best job as

they also add essential nutrients in a time-released manner.

Trees live and die in slow motion to our observation. We must slow our observations to tune in to the signals that trees are putting out to recognize signs of stress. Problems in your treescape will become more visible as you seek the flare.

It's also important to use proper terms. Soil is not dirt. Soil is a mixture of air, living microorganisms, organic dead stuff and minerals. Air is a combination of gases, such as nitrogen, oxygen and others. The best way to give plants air is to cultivate and offer the soil and growing space needed. Often, roots expand even further from the tree.

We must allow more air, gas exchange, and water absorption to occur deep in the soil. Water moves in all directions in the soil. If the tree does not perk up with cultivation and mulching, a slow small dose of a light fertilizer formulated for trees can be used. Special, low-nitrogen formulations are available for trees. It is easy to over-feed trees while adequately feeding the lawns nearby.

Trees are the longest-living organisms and longest-term survivors. They have outlasted dinosaurs, volcanoes, and hungry mammals over the ages. Now they face string trimmers, chain saws, and the competition of encroaching lawns.

If a tree is planted too deeply, even years after planting, it will be healthier with the careful removal of soil from the root crown.

These new skills are dirt simple. They will also help you as landscape managers to ask the right questions, and educated discussions about tree health and root flare can now be had. **SFM**

Jack O'Shea is a traveling crew trainer with ACRT Arborist Training. He is an ISA Board Certified Master Arborist, and holds an ISA Tree Risk Assessment Qualification certification. In 2020, Jack graduated from the American Society of Consulting Arborists Consulting Academy. He has been involved in the tree care industry for more than 30 years, and specializes in land use issues and construction mitigation for trees.

Important Ways Trees Improve Our Lives

By Maegan Mullinax

If you conduct a quick Google search by typing in “why are trees important” or a similar phrase, the Internet will yield more than 200 million results, including lists of benefits, values, efforts to save trees, and more, in less than a second. Why? Because trees have such a great impact on our lives and ecosystem.

Trees provide far more than shade and curb appeal. The Arbor Day Foundation lists several ways these vital living organisms bring added value to our lives, the planet, wildlife, and beyond.

Trees help clean our air. Trees remove pollution from the atmosphere, improve air quality and improve human health. According to the U.S. Forest Service, in the greater Kansas City area alone, trees remove 26,000 tons of air pollution each year.

Trees contribute to our health.

According to Harvard Medical School, spending time in nature can help reduce stress, anxiety, and depression, and maybe even improve our memory. We are fortunate in the green industry to work outdoors with trees daily, unlike other industries where professionals, such as office or health care workers, are not as fortunate.

Trees provide us with oxygen. A single large tree can provide one day's supply of oxygen for up to four people, according to North Carolina State University.

Trees help clean our drinking water. The U.S. Forest Service shares that forested watersheds provide drink-



ing water to more than 180 million Americans — that's just over half of the population of the United States.

Trees provide much-needed cooling. Sit back, relax, and skip the sunburn. Thanks to trees, shaded surfaces may be 20 to 45 degrees (Fahrenheit) cooler than the peak temperatures of un-shaded materials, according to the United States Environmental Protection Agency. Want to plant a shady, fast-growing tree? Consider a weeping willow, Texas red oak, northern catalpa, red maple, or American sycamore.

Trees help reduce the effects of climate change. Trees are magical living creatures that have the power to absorb carbon dioxide

(CO₂), and remove and store carbon while releasing oxygen back into the air. In just one year, one acre of mature trees takes in the amount of CO₂ produced by a vehicle driven 26,000 miles — that's a little more than one trip around the Earth.

Trees help us save energy. Saving energy often leads to saving money, right? As it turns out, the United States Department of Energy agrees, and notes that if trees are positioned properly, they can reduce a household's energy consumption for heating and cooling by up to 25%. This reduction could save an average U.S. household between \$100 and \$250 in energy costs annually.



Trees benefit wildlife. Trees provide vital wildlife habitats — including various pollinators that we work vigorously to protect.

Trees help reduce crime. Believe it or not, the University of Washington reports that when it comes to minor crimes, communities experience “less graffiti, vandalism, and littering in outdoor spaces with trees as a part of the natural landscape than in comparable plant-less spaces.”

Trees are a good investment of our public dollars. The U.S. Forest Service reports that investing in trees with regular maintenance is money well spent. Every dollar spent on planting and caring for a community tree yields benefits that are two to five times that investment — benefits that

include cleaner air, lower energy costs, improved water quality, improved stormwater control, and increased property values.

Trees increase our property values. Research by Pacific Northwest Research Station showed that the presence of street trees increased sale prices of houses in Portland, Ore., neighborhoods by an average of \$8,870 and reduced time on the market by an average of 1.7 days.

These examples demonstrate that it is imperative that we properly tend to and care for the trees around us, as life on Earth could not exist without trees. If you’re curious about the trees in your neck of the woods, consider using the Arbor Day Foundation’s Tree Identification

Field Guide (<https://www.arborday.org/trees/whatTree/>) to identify a tree simply by the kinds of leaves it produces. And the next time you’re outdoors, take a moment to think about the ways trees better your life. **SFM**

Maegan Mullinax is a business development manager and Safety Committee member at ACRT Services. She is an experienced arborist and horticulturalist and actively participates in the UVM industry. She is an ISA Certified Arborist, a member of the ISA Southern Chapter, and a member of the Fort Oglethorpe, Georgia Tree Board. She is also a member of the Georgia Tree Council and the Utility Arborist Association where she sits on the Professional Development Committee.

Dethatchers and Verticutters



BILLY GOAT POWER RAKE / DETHATCHER

The Billy Goat PR550 and PR551 Power Rake / Dethatcher efficiently remove matted thatch from turf in 20-inch passes, and its rugged design withstands the most demanding use. A 5.5 gross hp. Honda or Vanguard engine is coupled to a free-swinging heat-treated tempered flail blade reel that is mounted to construction-grade cast-iron pillow block bearings with grease zerks. Steel guards protect bearings and pulleys. The unit converts to an overseeder or vertislicer with optional accessories.

JOHN DEERE QA5 AND QA7 VERTICUTTERS

The John Deere QA5 and QA7 verticutters deliver an efficient, consistent verticutting depth. The QA5 features five-inch verticutter blades on a 3/4-inch standard spacing with standard carbide tips for excellent wear, while QA7 is equipped with seven-inch blades on a standard



1-1/8-inch spacing. Both models feature a depth system that is truly easy to adjust. The patented Speed Link system ties both ends of the rear roller together with a spring-loaded rod and worm gears, meaning adjustments can be performed from either end of the rear roller, automatically adjusting the other side at the same time. A simple front roller design allows for paralleling the front roller to the blades for optimal performance. Optional front and rear roller scrapers keep depth consistent, which is important for slicing rhizomes and stolons, promoting new growth, and opening up the canopy to incorporate topdressing.



REDEXIM VERTI-CUT SERIES

The Verti-Cut Series from Redexim are some of the most productive verti-

cutters on the market. Offered in 80-, 64- and 51-inch versions; the larger units can verticut more than 107,000 ft²/h, 86,000ft²/h, respectively. Blade spacing is standard at 1.18-inch with spacing kits available and the working depth is easily adjustable down to 2 inches. The 51-inch model is sized to be used on smaller tractors and even the Redexim Carrier walk-behind multi-function implement carrier.



RYAN MATAWAY DETHATCHER

The Ryan Mataway dethatcher is built for heavy-duty, professional turf renovation and dethatching. This self-propelled machine offers user-friendly features like cutting depth control right from the operator's station, removing those layers of dead grass, roots and debris matted between the soil and the growing grass, keeping the grass greener and healthier while minimizing the chance of disease.

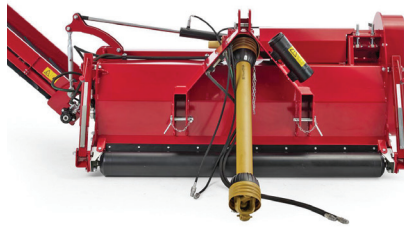
Its five different reel types, which suit a wide range of applications, are easily interchangeable without any tools. For optimal efficiency, a 19-inch working width allows users to cover up to 18,700

square feet per hour. Also, moving from job to job is easier with the independent engine and reel drives. Operators can also adjust the durable cutting blades down to a depth of 1-½ inches. Powered by a durable Honda engine, the Mataway dethatcher delivers excellent performance with minimal noise and vibration.



SMITHCO BIG VAC V-72 PTO SWEEPER VAC/VERTICUTTER

The Smithco Big Vac V-72 combination sweeper-verticutter is an effective turfgrass and debris-management tool that verticuts and sweeps in a single pass. The Big Vac is powered by a minimum 35-hp. tractor PTO, covers a 72-inch width with 72 hardened flail blades and holds 7 yards of material. When loaded, a hydraulic dump system unloads the debris to the ground out of a tapered hopper. All controls (lift/lower head, engage sweeper reel, engage verticut reel and hydraulic dump) are located directly behind the operator's seat. The Big Vac has a 34-inch, 8-blade oversized impeller to easily collect heavy clippings and other debris. Extra large 26.5 X 1400 X 12 Fairway turf tires minimize marking. In addition, a standard sweeper head is available. Remote grease zerks for impeller pillow blocks, impeller housing inspection/clean-out door and large hydraulic reservoir aids in maintenance and reliability.



TORO BULLSEYE NUSURFACE 470/790 FRAISE MOWERS

The Toro Bullseye NuSurface 470 and 790 are used to fraise mow, flail mow, level, dethatch, and renovate turf areas, as well as harvest sprigs. These products are ideal for use on golf courses and sports fields, and are quickly becoming the go-to grass removal tool for fast and efficient resurfacing projects. Their rotary action removes material and transfers it onto a conveyor system for disposal, leaving behind a smooth surface, immediately ready for sod or seeding. These machines are highly productive and can be adjusted in small increments for the desired level of aggressiveness. The standard blade set on the Bullseye NuSurface 470 and 790 turf renovation tools allows customers to fraise or flail mow and clean up the debris, all in a single-pass operation. A single-pass verticut and cleanup can also be performed following a simple blade change.



WOOD BAY TURF TECHNOLOGIES

Wood Bay manufactures dethatching verticut for The Toro corporation and many other corporations such as R & R

Products, JRM Products, Wiedenmann, and numerous other aeration firms. Wood Bay also introduced dethatching equipment for synthetic and natural turf for the NFL, universities such as Texas A&M, Rutgers, Purdue, U of California, Kentucky, Indiana, and numerous others. Golf courses across the country use Wood Bay Technologies products like the fds 9200/6000. The fds series of dethatching equipment simplifies the maintenance of turf surfaces and conditions including hilly fairways and rough areas. Ensures immediate results for an attractive healthy stand of cool and warm grasses throughout the playing season.



Z TURF EQUIPMENT Z-SEED

The Z-Seed from Z Turf Equipment performs three jobs – verticutting, dethatching and overseeding – with each pass. The 20-inch width strikes the right balance of size and productivity. Durable high-carbon steel blades remove thatch and provide maximum seed-to-soil contact for superior seed germination. A large-capacity 40-pound seed hopper makes quick work of big jobs with fewer fill-ups. The large-diameter mixer uses ground speed to regulate seed flow, ensuring even seed delivery in all conditions. Infinitely variable hydrostatic drive with powered reverse makes the Z-Seed as easy to operate as a self-propelled mower. **SFM**



New steel bed and GTX Lithium Ion Lifted model expand Toro Workman line

Campuses, facilities and sports complexes looking for a utility vehicle that can be customized to fit their needs will find two new options in Toro's Workman line. The Workman GTX Lithium Ion Lifted model combines higher ground clearance with lower maintenance costs, and the just-announced steel bed accessory boasts the most cubic feet of cargo space in its class. These new products add even more options to a lineup that offers hundreds of possible configurations.

The Workman GTX Lithium Ion Lifted has three additional inches of ground clearance compared to traditional Workman GTX vehicles. This makes it easier for operators to drive over rough or uneven areas without causing damage, and helps reduce the risk of accidentally dragging debris that can gouge the turf.

The lithium-ion technology powering the new Workman GTX Lithium Ion Lifted model is built to

deliver 15% longer runtime when compared to the GTX-E lead acid model. Plus, the vehicle's lithium-ion power packs are maintenance-free, eliminating expensive scheduled lead-acid battery replacement.

When the vehicle is ready for a charge, there's a high-efficiency charger on board that's ready to be connected to any standard power outlet. This model also has the largest cargo capacity of any lithium-ion powered model in its class, so it can handle big jobs.

Modern 12-inch wheels and large 22-inch tires help protect the turf by evenly distributing weight, and the tires feature a tread pattern specially designed for driving over turf. In addition, the lithium-ion power packs are nearly 26% lighter than lead-acid batteries, reducing the machine's overall weight for less wear and tear on fields and grounds.

Another advantage of the Workman line is its versatility. Crews can do more with a single machine by simply adding attachments and accessories. The new steel bed is the latest addition to Toro's Workman accessory offering, providing the most cubic feet of cargo space in its class.

Available for all current and former GTX models, the steel bed has the same 800-lb. capacity as Toro's poly bed. It also features water-resistant polyurea bed coating that not only adds sound and vibration damping, but also provides superior environmental and impact protection.

The Workman GTX Lithium Ion Lifted model and the new steel bed accessory are available now.



Kubota launches gas-powered RTV520

Kubota Tractor Corporation launched its gas-powered RTV520 with a new look and upgraded features. Featuring a variety of performance, appearance and comfort upgrades over its predecessor, the RTV500, the RTV520 was designed for large property owners and commercial contractors alike. Offered in general purpose and deluxe configurations, the RTV520 is available at Kubota dealerships.

"The RTV520 is the perfect utility vehicle for anyone who needs to get work done on their mid- to large-sized property and for commercial operators who need a reliable, quality utility vehicle on the jobsite," said Jacob Mandoza, Kubota senior product manager, utility vehicles. "The RTV520 is easy to operate with confidence, offers a quiet and comfortable ride, and provides durability at a value price point."

Boasting a new appearance, the RTV520 is tougher and more aggressive than the previous generation from the inside out. A more powerful 2-cylinder Kubota liquid-cooled EFI

engine provides more than 17 horsepower, while Electric Fuel Injection (EFI) makes starting the engine in cold weather easier and gives instant power with greater throttle control. Equipped with a Variable Hydrostatic Transmission (VHT) that provides exceptional performance on any terrain with smooth and powerful acceleration, low-speed driving is enhanced through smooth throttle control, great traction and increased maneuverability. Additionally, dynamic braking allows for one-pedal operation, making jobs that require frequent stops easier.

Regardless of experience behind the wheel of a utility vehicle, ease of operation is made possible through the VHT's one-pedal operation, smooth acceleration and engine braking, leading to driver confidence. A large cargo bed opening provides easy access to components for quick and simple maintenance, and because the VHT does not have a belt, there is no worry about having to replace this traditionally difficult-to-fix and easy-to-break item. Key areas of the vehicle, like the underbody, and beneath the cargo box and operator's station are protected, and the radiator features a screen that prevents mud and grass from sticking to it. And a heavy-duty cargo bed with 441 lbs. of cargo capacity and a towing capacity of 1,168 lbs. means the RTV520 is ready to tackle the toughest jobs.

At 54.7 inches wide and 74 inches tall, the RTV520's narrow stance allows it to easily travel the slimmest passageways and fit through the tightest spaces. With a tight turning diameter of just 21.7 feet, the RTV520 is able to access areas where bigger utility vehicles simply can't go. An im-

proved suspension system features a 5-link rear system that helps prevent the vehicle from bottoming out and improves rider comfort, even in the roughest terrain. A redesigned seat with 30 percent softer material provides more comfort during long rides.

Michelin increases load-carrying capacity of X Tweel Turf

Michelin North America, Inc., has increased the load-carrying capacity of the 26x12N12 X Tweel Turf from 862 pounds to 1,031 pounds to launch the new 26x12N12 X Tweel Turf XL. Users of this new 26-inch



airless radial tire may choose from three hub configurations that will fit 4x4-inch and 5x4.5-inch bolt patterns for a variety of machines, including:

- John Deere - ZTrak Z997
- Bad Boy Mowers - Renegade

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- Kubota - ZD1211, ZG327, and ZD1511
- Scag - Turf Tiger STTII
- Toro - ZMaster 7500G and 7500D

"The new Michelin X Tweel Turf XL keeps all the benefits of the current Tweel it is replacing, including consistent hub height, which helps ensure the mower deck produces an even cut, excellent lateral stability on hill-sides and sloped surfaces, outstanding operator comfort and no flats," said Justin Brock, senior marketing manager, Michelin – Beyond Road Business Line. "The new XL version offers increased load capacity, which is helping us deliver solutions that meet customers' needs in the commercial turf market."

Once bolted on, there is no air pressure to maintain, thus eliminating the need to carry spare tires, tools or repair kits. This airless solution contains high-performance compounds and an efficient contact patch designed to provide a long wear life that is two to three times that of a pneumatic tire at equal tread depth. The Michelin X TWEEL Turf XL is available immediately for online sale or through the Michelin Tweel dealer network.

Echo SRM-410X trimmer

Echo Incorporated launched the company's most powerful trimmer in North America, the SRM-410X. With a 42.7cc engine that generates 2.23



horsepower, this trimmer has the power and durability to last 6-8 hours a day and is designed for heavy clearing, ideal for tall, heavy grasses, hilly terrain, ditches and weed abatement.

"The SRM-410X delivers category-leading power and maximum versatility to help professionals conquer heavy cutting on challenging terrain," said Mark Taylor, product manager, Echo Incorporated. "The high-power output, large-capacity fuel tank, and Speed-Feed 450 head combine to give professionals the power they need to tackle the toughest clearing jobs."

Key features of the SRM-410X include:

- Commercial-grade pleated air filtration system that protects the engine in harsh conditions and extends filter maintenance intervals
- Full wrap fuel tank stand for added protection
- 20-inch cutting swath
- Speed-Feed 450 trimmer head
- Blade capable: 2-in-1 shield, barrier bar, blade mount hardware, harness and harness ring included to allow quick transition to a brushcutter blade
- Solid steel shaft allows for smooth acceleration
- Extra heavy-duty vibration reduction system reduces operator fatigue and increases comfort
- MSRP: \$549.99

The SRM-410X comes with a two-year commercial warranty and a five-year consumer warranty.



Altoz introduces tracked stand-on mower

Altoz released the first tracked stand-on mower, the TSX 561 i. Equipped with the steep-mowing capabilities of the Altoz track system and its combination of speed, stability and maneuverability, the TSX allows operators to safely and effectively mow terrain that traditional mowers simply cannot.

The TSX's most obvious feature is its aggressive 11-inch wide all-terrain track. The patented, industry-exclusive TSX track system is complemented by TorqFlex front suspension with 13-inch flat-free tires to decrease chassis bounce and increase operator control. Together with its rear axle torsion suspension, the result is stability with low ground pressure, minimal compaction and an industry-best ride.

At the heart of the TSX control center is the ergonomic, adjustable hand rests and adjustable shock-absorbing rider platform. The low center of gravity platform allows ample room for foot movement, and side-mounted foot stands provide secure footing and increased control. SmarTrac Pro and electric dial throttle controls are intuitive and within easy reach. The TSX is equipped with a 29.5-horsepower Kawasaki FX850V-EFI engine. **SFM**

New Video to Highlight the Profession

The STMA Advocacy and Learning Initiatives committees came to the same conclusion in fourth quarter 2020 as they worked to advance their committee charges: STMA needs a video that showcases the profession and highlights the role of the sports field manager.

Appropriate to a wide-reaching audience — employer groups, athletic directors, athletes, students and the public — the STMA video project will include a sports field manager, facility personnel such as an athletic director, and an athlete. These key people will provide compelling reasons why a sports field manager is needed at the facility. Safety of the field surfaces for athletes and stewardship of the environment will be a significant focus. The video will also make the case that the career is a viable and attractive option for students interested in staying involved in sports and/or those who want a career taking care of the environment or specializing

in turfgrass management. Other key messages include how highly educated and experienced sports field managers are and the value they bring to any sports facility — no matter the size or level of sports being played there.

STMA's one-year "bridge" strategic plan for 2021 has the stated goal: Increase the value of STMA to its members by promoting professionalism within our industry and advancing STMA Brand Awareness. The video will help to achieve this goal.

The video will be short — approximately 3 minutes — and plans are to air it during relevant state association conferences, on their websites and through their other communication vehicles. These industries include parks and recreation state associations, state athletic directors, school business officials, landscape-focused associations, environmental organizations, and career sites. It will be uploaded to STMA's YouTube channel and shared with STMA's affiliated chapters and the entire membership. It is recommended that chapters show it during meetings

and members use it with their employers and constituents, as well as air it on their video boards during sports events.

The video will be professionally produced by STMA's PR firm, Buffalo Agency, during late spring and early summer. Many state association meetings are scheduled in the fall and winter months, and the STMA Advocacy Committee will be working to get it placed for these events.

Committee members (The Advocacy Committee will be overseeing this project) include:

ADVOCACY

Chair: Jeremy Driscoll

Members: Cliff Driver, CSFM; Jesse Driver, CSFM; Alan Dungey, CSFM; Michael Goatley, Ph.D.; Rick Perruzzi, CSFM; Ben Polimer; Joseph Sawyer; and Sheree Scarbrough

LEARNING INITIATIVES

Chair: Alpha Jones, CSFM

Members: James Bergdoll, CSFM; Tim Howe; Kevin Mercer, CSFM; Nick McKenna, CSFM; Marc Moran, CSFM; Jeff Salmond, CSFM; Bri Schneider; Robbie Miller; Turner Revels; Matt Tobin; and Dan Sandor, Ph.D.

SAFE Golf Tournament

The 2021 SAFE Golf Tournament began on April 7 and will run through September 20. The app "18 Birdies" will be used to run the tournament virtually. All participants will need to download the app and create a profile to play in the tournament and input their scores. There will be two formats available, individual stroke play and tournament style. The recommended donation is \$15 per person each time you play, donations will be accepted via Venmo. Participants are encouraged to recruit friends and play as many times as they would like. On the app, participants will be able to view the leaderboard and compare their score to the scores of their friends and colleagues. Prizes will be given out to the winners in each category. **SFM**

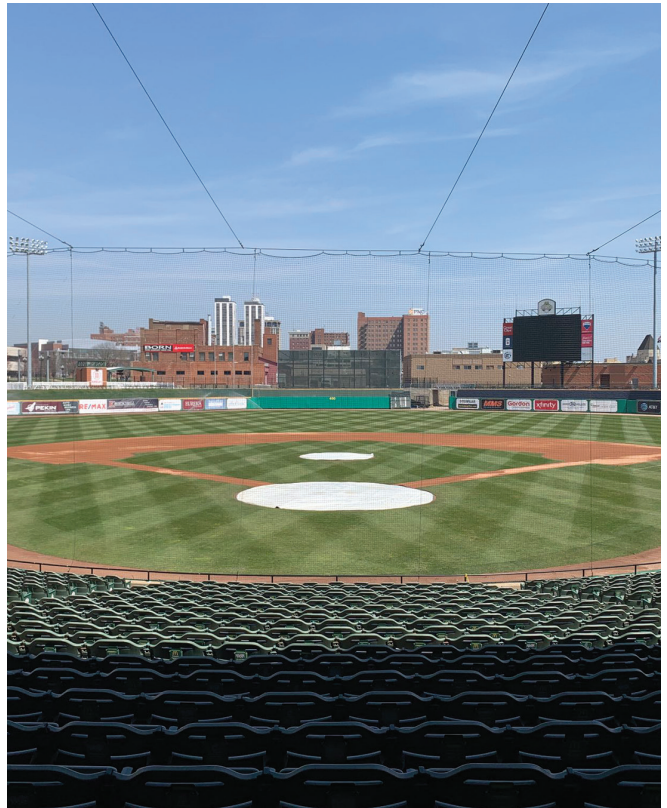
The following are some industry Tweets from the past month:



@DBAPGrounds

#OperationNoRye getting there! To be continued...

APRIL 5



@dirtyGkeeper

First mow pattern and I couldn't be happier.

APRIL 4



@UCRturf drought

First day on the job and first trip... @UCRturfgrass had a bit of help this morning on a site visit! Checking and rating areas for #poa control.

APRIL 5



@OSUgrounds_crew

All set for Bedlam today

@CowgirlFC

MARCH 27



@T_LenzTurf

Measure, edge, till, add, till, float, tamp, roll, nail, float, roll 50/50. The guys are absolutely killing it.

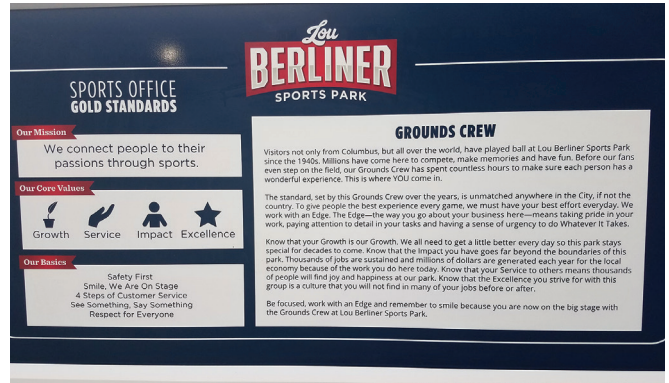
MARCH 26



@msudawg2004

The ole girl is ready for practice tomorrow. @HailStateFB Spring game is right around the corner. Fantastic job @felicianog_7

MARCH 26



@rtdemayturf

New sign for the shop. Everyone on our staff now walks out of the building and past this sign everyday. It took several years and many fantastic people to build this culture. Proud to share it with all those who will be part of our staff now and in the future.

MARCH 23



@nsherry2

Data collection discussion! Measuring water content, soil temp, and field observation data to ensure optimum. Turf management, it's a science.

MARCH 22

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STMA Affiliated Chapters Contact Information

Sports Turf Managers Association of Arizona: www.azstma.org

Colorado Sports Turf Managers Association: www.cstma.org

Florida #1 Chapter (South):
 305-235-5101 (Bruce Bates) or
 Tom Curran, CTomSell@aol.com

Florida #2 Chapter (North):
 850-580-4026,
 John Mascaro, john@turf-tec.com

Florida #3 Chapter (Central):
 407-518-2347, Dale Croft,
dale.croft@ocps.net

Gateway Chapter Sports Turf Managers Association:
www.gatewaystma.org

Georgia Sports Turf Managers Association: www.gstma.org

Greater L.A. Basin Chapter of the Sports Turf Managers Association:
www.stmalabasin.com

Illinois Chapter STMA: www.ILSTMA.org

Intermountain Chapter of the Sports Turf Managers Association:
<http://imstma.blogspot.com>

Indiana: Contact Clayton Dame,
Claytondame@hotmail.com or
 Brian Bornino, bornino@purdue.edu
 or Contact Joey Stevenson,
jstevenson@indyindians.com

Iowa Sports Turf Managers Association:
www.iowaturfgrass.org

Keystone Athletic Field Managers Org. (KAFMO/STMA): www.kafmo.org

Mid-Atlantic STMA: www.mastma.org

Michigan Sports Turf Managers Association (MiSTMA): www.mistma.org

Minnesota Park and Sports Turf Managers Association: www.mpstma.org

MO-KAN Sports Turf Managers Association: www.mokanstma.com

New England STMA (NESTMA):
www.nestma.org

Sports Field Managers Association of New Jersey: www.sfmanj.org

North Carolina Chapter of STMA:
www.ncsportsturf.org

Northern California STMA:
www.norcalstma.org

Ohio Sports Turf Managers Association (OSTMA): www.ostma.org

Oklahoma Chapter STMA:
 405-744-5729; Contact:
 Dr. Justin Moss okstma@gmail.com

Oregon STMA Chapter:
www.oregonsportsturfmanagers.org
oregonstma@gmail.com

Ozarks STMA: www.ozarksstma.org

Pacific Northwest Sports Turf Managers Association: www.pnwstma.org

Southern California Chapter:
www.socalstma.com

South Carolina Chapter of STMA:
www.scstma.org

Tennessee Valley Sports Turf Managers Association (TVSTMA): www.tvstma.com

Texas Sports Turf Managers Association:
www.txstma.org

Virginia Sports Turf Managers Association: www.vstma.org

Wisconsin Sports Turf Managers Association: www.wstma.org

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Replacing Our Fields

Q: The amount of damage we have had on our school fields has been excessive. We had a lot of winter rains on poor-draining fields. The pandemic caused us to host fall and spring sports this spring, which really increased wear. Our users, parents and school officials are all disappointed in the field conditions, and are beginning to talk about options going forward. Replacing natural grass fields with synthetic surfaces keeps coming up. I prefer natural grass, but that is not my decision. What are your thoughts?

A: I continue to get questions related to field conditions this spring, and this question is largely a continuation of my last Q&A. I have seen a number of fields that have shown their limitations with bare ground over significant portions of the field. Field managers have been explaining the issues to those questioning field conditions, but some people just do not understand how fields that had good turfgrass cover in previous years are now “falling apart.”

The situation has become so bad that some schools have begun looking into field rebuilds later in the year. Some groups are thinking that a synthetic surface will solve all their maintenance problems. It still amazes me when I hear the amount of money a school is willing to spend on a synthetic field when they were reluctant to spend a small fraction of that cost on either the proper construction or maintenance of their natural grass field.

My suggestion, as an educator, is to try to educate those around you (e.g. athletic director, school superintendent, etc.) that may be involved in this decision. I know some field managers are at ease with their school's administration. However, others may not have that type of relationship. As the most informed person on field maintenance, I would encourage you to start gathering information on renovating and/or rebuilding your fields. If that is well beyond the scope of your position, at least offer to assist. This may be the best chance you have of getting a field built correctly.

One place to start would be to contact the Certified Field Builders in your state or area. To be certified they must have worked at least three years and have built at

least 20 projects. Not only must they demonstrate their expertise to be certified, but these experienced individuals also tend to have access to quality building materials at good prices. They can help develop a realistic construction budget and help ensure the end product will be a better-performing and safer facility for years to come. Depending on your field's age and its original construction, you may be able to get by with a drainage and playing surface renovation, or they may recommend a total rebuild.

Many of these builders are also certified in constructing facilities that utilize synthetic turf on the playing surface, so they are able to make construction comparisons. If your school is really interested in switching to a synthetic surface, they should also educate themselves on not only the cost of installing these fields, but also the implications of using synthetic surfaces. There is substantial information available related to cost, management, injury rates and player preferences of using these surfaces that may surprise people at your school. The two most common surprises are the maintenance requirements for synthetic fields and the recent studies that show much higher injury rates on synthetic surfaces.

There is a lot of information available to those interested. A number of organizations — including Turf Producers International (TPI), Synthetic Turf Council, and STMA — have readily available resources related to the use of their products that can be downloaded and shared. The time you spend getting this information together can really pay big dividends toward getting quality fields for your school's athletes. **SFM**



Grady Miller, Ph.D.

Professor and Extension Turf Specialist
North Carolina State University

Questions?

Send them to Grady Miller at North Carolina State University, Box 7620, Raleigh, NC 27695-7620, or e-mail grady_miller@ncsu.edu
Or, send your question to Pamela Sherratt at 202 Kottman Hall, 2001 Coffey Road, Columbus, OH 43210 or sherratt.1@osu.edu

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